

June 10, 2012

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary, Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

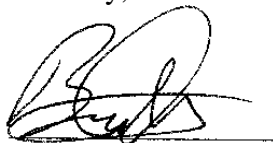
**Re: Progeny LMS, LLC and NextNav LLC
Permitted Oral Ex Parte Presentation
PS Docket No. 07-114 & WT Docket No. 11-49**

Dear Ms. Dortch:

On June 6, 2012, representatives of Progeny LMS, LLC (“Progeny”) and NextNav LLC (“NextNav”) met with Charles Mathias, Special Counsel to Chairman Julius Genachowski. Most of the discussion focused on NextNav’s development and testing of a highly accurate position location service for use to support E911 emergency response services, particularly in indoor and urban areas where existing location services are challenged. The parties also briefly addressed the Commission’s consideration in PS Docket No. 07-114 of indoor location accuracy testing requirements for wireless carriers. In addition, the parties discussed the status of Progeny’s construction of its multilateration location and monitoring service (“M-LMS”) network to support the NextNav service and the additional steps that Progeny is taking to further demonstrate compliance with Section 90.353(d) of the Commission’s rules. Participating in the meeting on behalf of Progeny and NextNav were Gary Parsons, CEO of NextNav, and the undersigned.

The substance of the discussion tracked closely with the attached presentation, which was distributed during the meeting. Please contact the undersigned if you have any questions.

Sincerely,



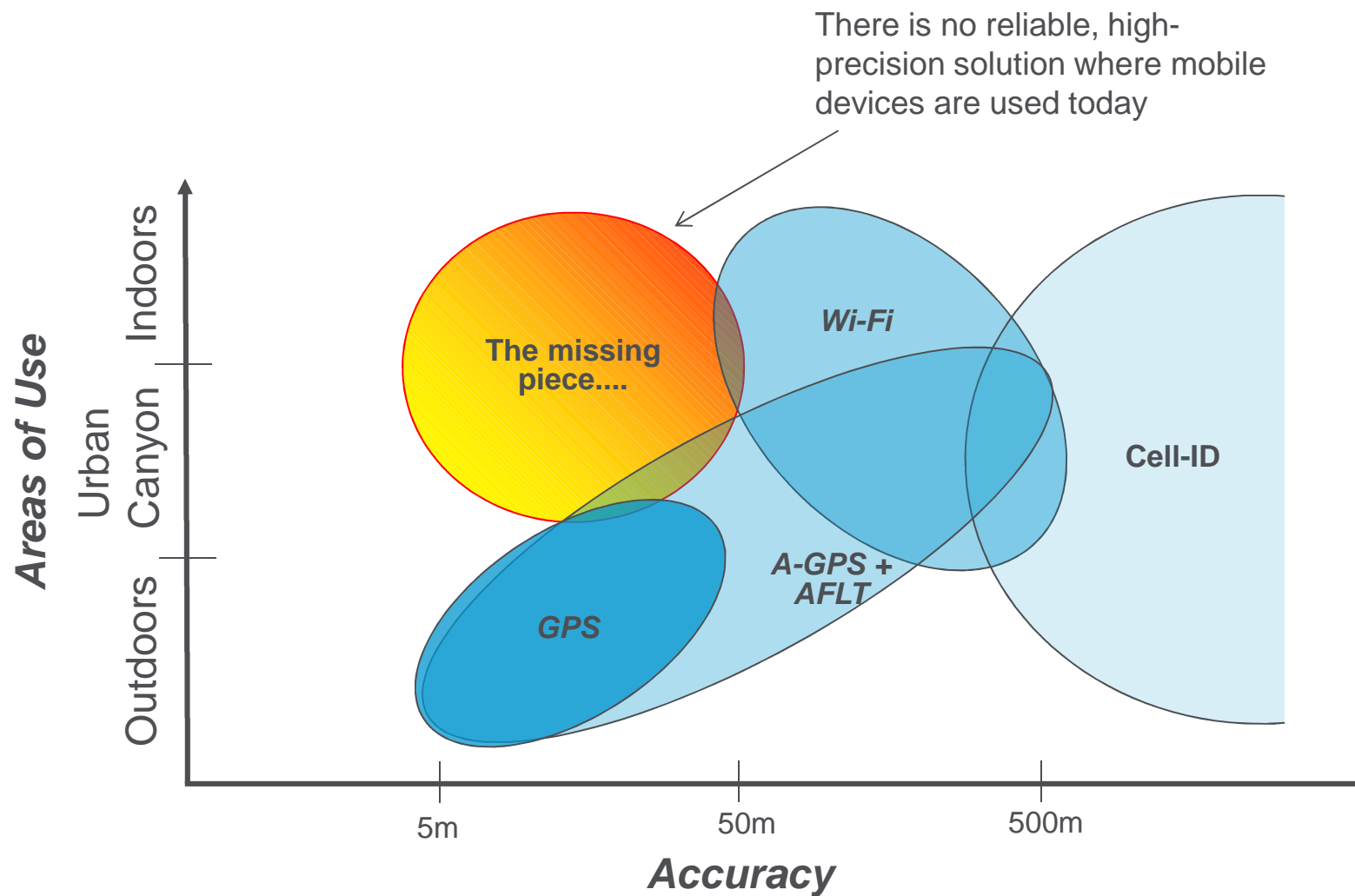
Bruce A. Olcott
Progeny LMS, LLC and NextNav LLC

NextNav LLC

High Precision Urban and Indoor Positioning Services

June 6, 2012

Position Technology State of Affairs



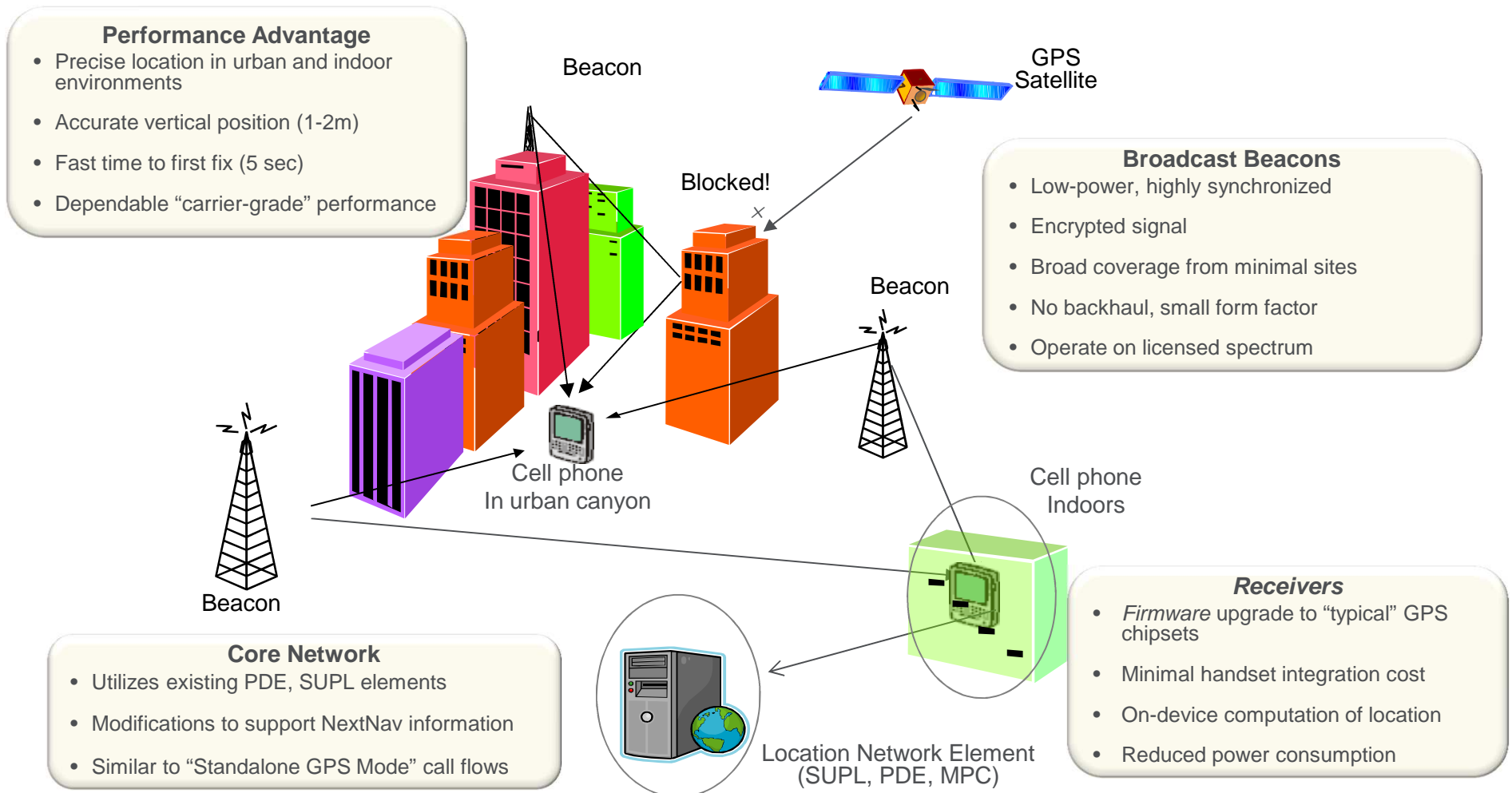
What is the Ideal Solution?



- High accuracy in urban and indoor environments
- High reliability, high yield and pervasive coverage (ubiquitous scale)
- Low variability of results
- Low time to first fix
- Reduced power drain
- On-device location computation (personal privacy)
- Minimal device and core network impact
- Transparent to existing applications

**A network of high-power GPS satellites on the ground
would satisfy all of these requirements**

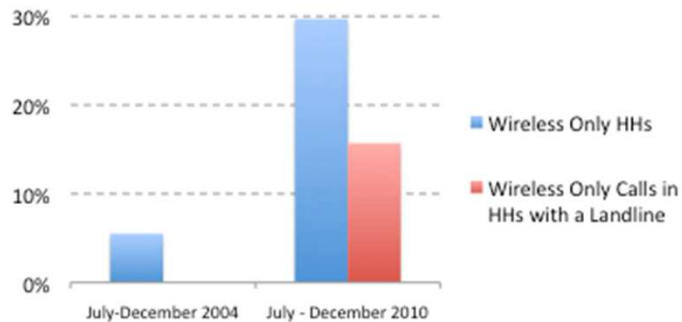
NextNav Metro Overlay Deployment



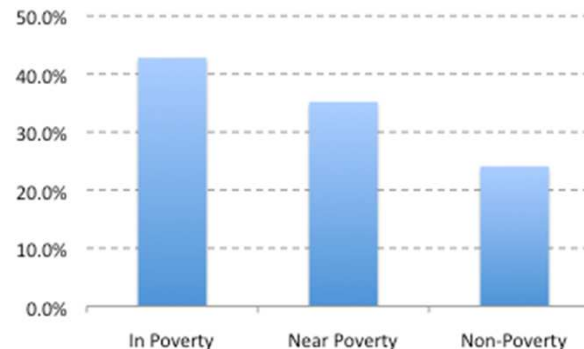
Mobile E911 is an Indoor Service

- In Tarrant County, TX, in 2001, 34% of all E911 calls were placed from mobile devices; by 2010 more than 80% of E911 calls were placed from mobiles
 - Recent statements by other public safety groups (e.g., the Colorado PSAP) have disclosed similar statistics, reporting more than 70% of E911 calls in aggregate are from mobile devices
- Mobile devices today are predominately used indoors, with more than 70% of voice calls and 80% of data sessions occurring within a structure¹
- This is the result of massive adoption of cellular devices, and a continuing trend of fixed line replacement²

Wireless-Only Households, 2004
- 2010



Wireless-Only Households, by
Income Group



At-risk families are more affected by the lack of reliable indoor E911 services

(1) Source: Strategy Analytics via indoorlbs.com.

(2) Source: CDC, January 2011, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2010".

FCC Proceedings are Under Way



- **As the Commission’s CSRIC explained in its 2011 Final Report:**
 - “As more and more of the population moves away from landline service and relies solely on mobile telephony devices, a larger percentage of E9-1-1 calls are being made via mobile telephony”¹
- **The Commission therefore concluded that:**
 - Indoor location accuracy is a “significant public safety concern that requires development of indoor technical solutions and testing methodologies to verify the effectiveness of such solutions.”²
- **The Commission has also recognized the need for accurate elevation information, stating:**
 - Z-axis elevation location information “could greatly enhance accuracy, and have particular benefit in buildings in terms of identifying the floor where the 911 caller is located.”³
- **The Commission is currently exploring whether to require carriers to conduct indoor location accuracy testing and, if so, using what standards.**⁴
 - The Commission asked CSRIC to investigate and CSRIC Working Group 3 is developing a report

¹ CSRIC WG 4C Final Report at 59 (March 14, 2011).

² Wireless E911 Location Accuracy Requirements, *Notice of Proposed Rulemaking, Third Report and Order, and Second Further Notice of Proposed Rulemaking*, FCC 11-107, ¶ 86 (July 13, 2011) (“Second FNPRM”).

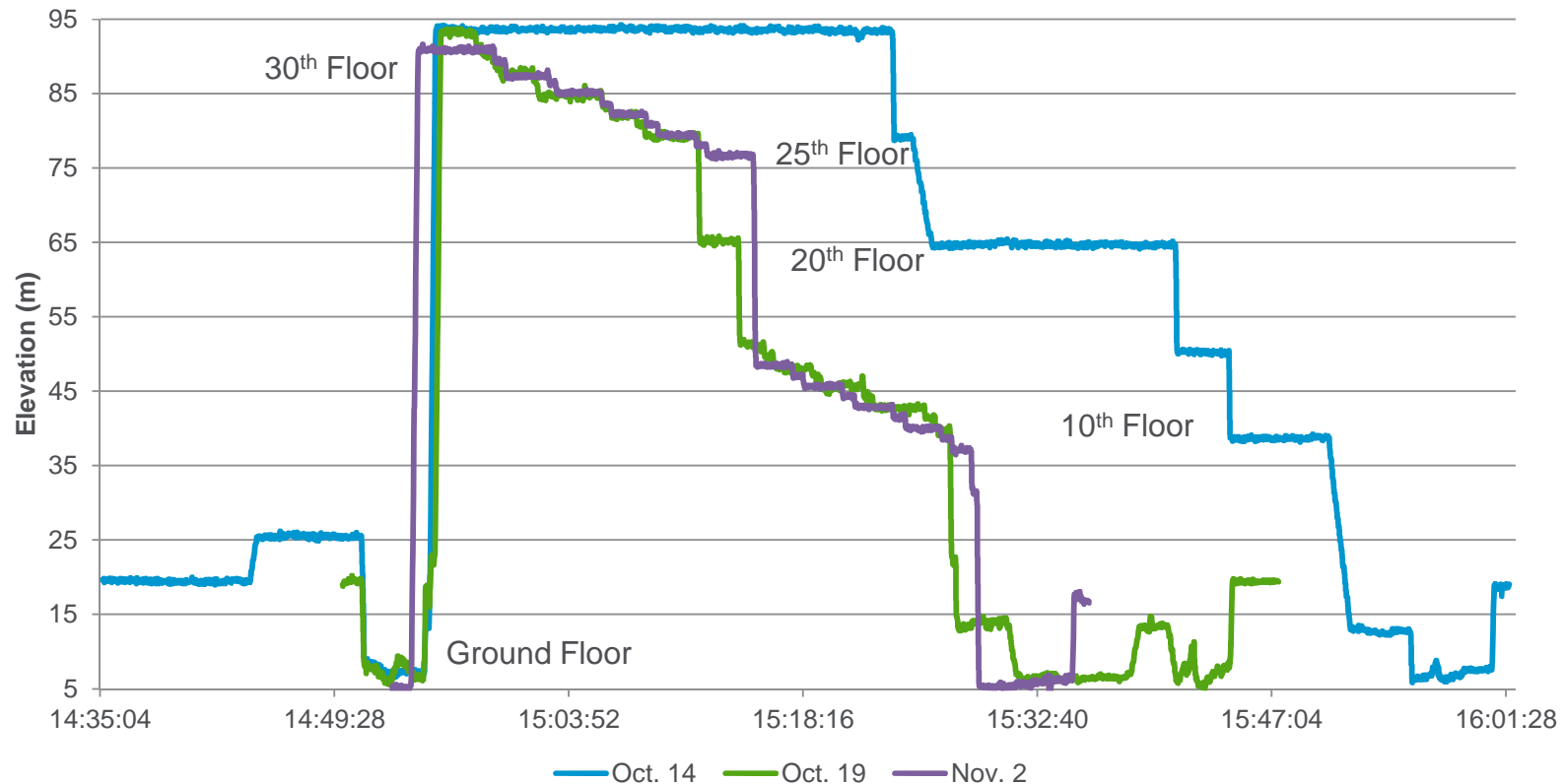
³ Wireless E911 Location Accuracy Requirements, *Further Notice of Proposed Rulemaking and Notice of Inquiry*, 25 FCC Rcd 18957, ¶ 23 (2010)..

⁴ Second FNPRM, ¶ 87.

Floor-Level Height Accuracy



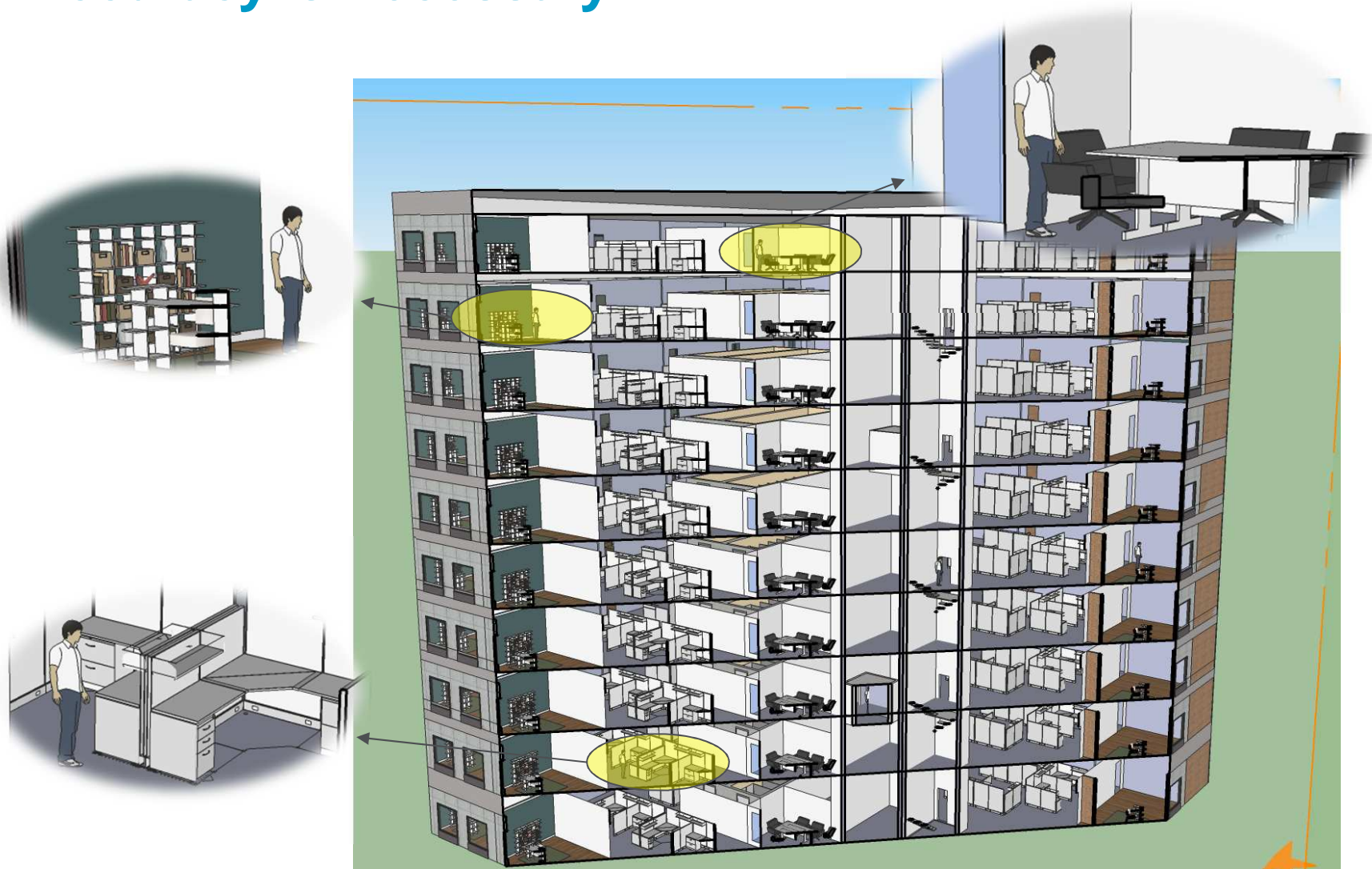
Intercontinental Hotel, Day-to-Day Comparison



Note: Different paths were followed each day, but they all involved taking the elevator to the 30th floor and then descending using a combination of stairs and elevator with stops on various floors

NextNav is building the nation's first high precision, real time barometric pressure calibration network

In a Complex Interior Floor Level Accuracy is Necessary



Current Technology versus NextNav

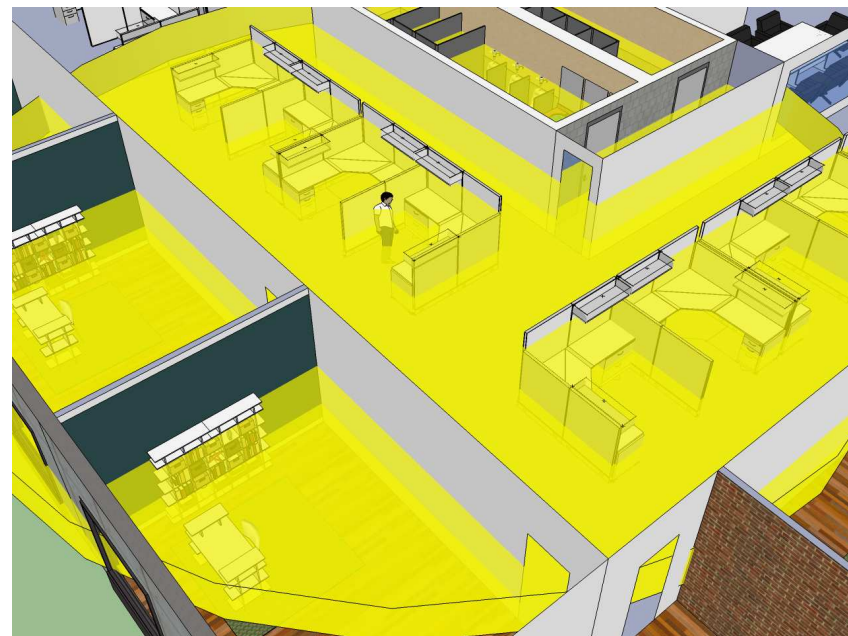


Best Current Positioning Case (using technology not suitable for E911)



- Probably can achieve building-level precision
- No height information
- No information about likely location within building

NextNav Case



- To-scale depiction of a 20m area
- Limits search area to small space on one floor
- When seconds matter, this is a radical step forward for first responders

FCC Regulatory Issues



- NextNav's system operates in spectrum licensed to Progeny LMS, LLC in the Multilateration Location and Monitoring Service ("M-LMS") at 902-928 MHz
- Although M-LMS is a primary service, M-LMS licensees must demonstrate they will not cause unacceptable levels of interference to secondary Part 15 devices
 - Progeny is employing a number of interference mitigation techniques to protect Part 15 systems
 - On January 27, 2012, Progeny filed a test report with the FCC demonstrating these capabilities
 - WTB and OET recently asked Progeny to conduct limited additional testing in cooperation with three entities involved in the manufacture of Part 15 devices
- Progeny's first build out deadline is July 19, 2012, at which point Progeny is required to make its service available to 1/3 of the population in its 115 economic areas
 - Progeny will satisfy this requirement in a significant number of very populated and urban areas
 - Progeny will request a build out extension in other more suburban and rural economic areas
 - An extension is justified by the regulatory hurdles remaining before Progeny, and by the significant need for its service in urban areas where existing position location services are highly challenged

- **NextNav is deploying a revolutionary wide-area positioning system**
 - Fully managed network brings high-precision, reliable location indoors
 - Technology requires no chipset hardware modifications and modest device integration
 - Encrypted signals allow management of access to technology
- **Mobile services and devices are increasingly dependent upon location**
- **The location needs for E911 significantly outstrip current technologies**
- **NextNav brings “carrier grade” ubiquity, reliability and accuracy to location**